

KEY FEATURE

Independent Anti-Collision system for Maximum Safety



IDORAIL® is an "Anti-collision" system to prevent the collision of two trains, orthogonally and independently of all other existing security systems on the market. This system is based on a component on board each loco (similar to the "AIS" system of ships), a centralized component on the web (Internet of Things), and a component consisting of a network of sensors specifically developed to equip the infrastructure devices (such as light signals and switches) and "link" them (use of ultra-modern, frequency-specific telecommunications) to the Internet. These three components are interconnected. This concept is quite innovative in the railway field. It is based among other things on a modeling of the different cases of trains on a collision course, running close to each other, and in real time.

Main Features

IdORail® is composed of :

- Independent safety functionality (= "orthogonal ") of other installed or planned systems.
- Orthogonal (i.e. from a different angle of view) monitoring of the trains.
- Works even where no telecommunications coverage = "dark territory".
- Automatic warning in the event of risk of collision on single track sections (= outside stations)
- SMS messaging between drivers and COTRAF / OCC at all locations.
- No need for other systems or costly facilities on board.
- Based on the INMARSAT satellite tag (specific software developed under ATRAC), and on a rugged "Android" computer tablet running the TAWS / IDORAIL software.

Technical Specifications

IDORAIL® main components:

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| Software | - Robust software running on an "Android" tablet. |
| Sensors | - Various sensors to detect position and status of light signals and switches |
| Telecoms | - Telecommunications means to link sensors and computers to the Internet of Things |

IDORAIL® was designed and is produced by FUTURE RESOURCES sa, a Belgian company developing innovative and cost effective solutions for small to medium size railways. **RT Onboard®** was developed with Walloon government funding, as an experimental research project followed by industrial development.

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